[3510-16-P]

## **DEPARTMENT OF COMMERCE**

**United States Patent and Trademark Office** 

[Docket No. PTO-P-2012-0052]

Request for Comments and Notice of Roundtable Events for Partnership for Enhancement of Quality of Software-Related Patents

**AGENCY:** United States Patent and Trademark Office, Commerce.

**ACTION:** Request for comments, Notice of meetings.

SUMMARY: The United States Patent and Trademark Office (USPTO) seeks to form a partnership with the software community to enhance the quality of software-related patents (Software Partnership). Members of the public are invited to participate. The Software Partnership will be an opportunity to bring stakeholders together through a series of roundtable discussions to share ideas, feedback, experiences, and insights on software-related patents. To commence the Software Partnership and to provide increased opportunities for all to participate, the USPTO is sponsoring two roundtable events with identical agendas, one in Silicon Valley, and the other in New York City. Each roundtable event will provide a forum for an informal and interactive discussion of topics relating to patents that are particularly relevant to the software

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community. While public attendees will have the opportunity to provide their individual input, group consensus advice will not be sought.

For these initial roundtable events, this notice sets forth several topics to begin the Software Partnership discussion. The first topic relates to how to improve clarity of claim boundaries that define the scope of patent protection for claims that use functional language. The second topic requests that the public identify additional topics for future discussion by the Software Partnership. The third topic relates to a forthcoming Request for Comments on Preparation of Patent Applications and offers an opportunity for oral presentations on the Request for Comments at the Silicon Valley and New York City roundtable events. Written comments are requested in response to the first two discussion topics. Written comments on the third discussion topic must be submitted as directed in the forthcoming Request for Comments on Preparation of Patent Applications.

**DATES:** *Events*: The Silicon Valley event will be held on Tuesday, February 12, 2013, beginning at 9 am Pacific Standard Time (PST) and ending at 12 pm PST. The New York City event will be held on Wednesday, February 27, 2013, beginning at 9 am Eastern Standard Time (EST) and ending at 12 pm EST.

*Comments*: To be ensured of consideration, written comments must be received on or before March 15, 2013. No public hearing will be held.

Registration: Registration for both roundtable events is requested by [INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Events: The Silicon Valley event will be held at:

Stanford University
Paul Brest Hall
555 Salvatierra Walk
Stanford, CA, 94305-2087

The New York City event will be held at:

New York University Henry Kaufman Management Center Faculty Lounge, Room 11-185 44 West 4<sup>th</sup> St. New York, NY 10012

Comments: Written comments should be sent by electronic mail addressed to

SoftwareRoundtable2013@uspto.gov. Comments may also be submitted by mail addressed to:

Mail Stop Comments - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA

22313-1450, marked to the attention of Seema Rao, Director Technology Center 2100. Although comments may be submitted by mail, the USPTO prefers to receive comments via the Internet.

The comments will be available for public inspection at the Office of the Commissioner for Patents, located in Madison East, Tenth Floor, 600 Dulany Street, Alexandria, Virginia, and will be available via the USPTO Internet Web site at http://www.uspto.gov. Because comments will be available for public inspection, information that is not desired to be made public, such as an address or phone number, should not be included in the comments. Parties who would like to rely on confidential information to illustrate a point are requested to summarize or otherwise

*Registration*: Two separate roundtable events will occur, with the first in Silicon Valley and the second event in New York City. Registration is required, and early registration is recommended because seating is limited. There is no fee to register for the roundtable events, and registration

submit the information in a way that will permit its public disclosure.

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will be on a first-come, first-served basis. Registration on the day of the event will be permitted on a space-available basis beginning 30 minutes before the event.

To register, please send an e-mail message to SoftwareRoundtable2013@uspto.gov and provide the following information: (1) your name, title, and if applicable, company or organization, address, phone number, and e-mail address; (2) which roundtable event you wish to attend (Silicon Valley or New York City) and (3) if you wish to make an oral presentation at the event, the specific topic or issue to be addressed and the approximate desired length of your presentation. Each attendee, even if from the same organization, must register separately.

The USPTO will attempt to accommodate all persons who wish to make a presentation at the roundtable events. After reviewing the list of speakers, the USPTO will contact each speaker prior to the event with the amount of time available and the approximate time that the speaker's presentation is scheduled to begin. Speakers must then send the final electronic copies of their presentations in Microsoft PowerPoint or Microsoft Word to SoftwareRoundtable2013@uspto.gov by February 1, 2013, so that the presentation can be displayed at the events.

The USPTO plans to make the roundtable events available via Web cast. Web cast information will be available on the USPTO's Internet Web site before the events. The written comments and list of the event participants and their affiliations will be posted on the USPTO's Internet Web site at www.uspto.gov.

If you need special accommodations due to a disability, please inform the contact persons identified below.

**FOR FURTHER INFORMATION CONTACT:** Seema Rao, Director Technology Center 2100, by telephone at 571-272-3174, or by electronic mail message at seema.rao@uspto.gov or Matthew J. Sked, Legal Advisor, by telephone at (571) 272-7627, or by electronic mail message at matthew.sked@uspto.gov.

## **SUPPLEMENTARY INFORMATION:**

- I. Purpose of Notice: This notice is directed to announcing the Software Partnership which is a cooperative effort between the USPTO and the software community to explore ways to enhance the quality of software-related patents. The Software Partnership will commence with the two bi-coastal roundtable events. The initial topics selected for comment and discussion have been chosen based on input the USPTO has received regarding software-related patents. The input has been gleaned from public commentary on patent quality, dialogue with stakeholders that have requested that the USPTO take a closer look at the quality of software-related patents, and from insight based on court cases in which software-related patents have been the subject of litigation. The public is invited to provide comments on these initial topics and to identify future topics for discussion.
- II. Background on Initiative to Enhance Quality of Software-Related Patents: The USPTO is continuously seeking ways to improve the quality of patents. A quality patent is defined, for purposes of this notice, as a patent: (a) for which the record is clear that the application has received a thorough and complete examination, addressing all issues on the

record, all examination having been done in a manner lending confidence to the public and patent owner that the resulting patent is most likely valid; (b) for which the protection granted is of proper scope; and (c) which provides sufficiently clear notice to the public as to what is protected by the claims.

Software-related patents pose unique challenges from both an examination and an enforcement perspective. One of the most significant issues with software inventions is identifying the scope of coverage of the patent claims, which define the boundaries of the patent property right. Software by its nature is operation-based and is typically embodied in the form of rules, operations, algorithms or the like. Unlike hardware inventions, the elements of software are often defined using functional language. While it is permissible to use functional language in patent claims, the boundaries of the functional claim element must be discernible. Without clear boundaries, patent examiners cannot effectively ensure that the claims define over the prior art, and the public is not adequately notified of the scope of the patent rights. Compliance with 35 U.S.C. 112(b) (second paragraph prior to enactment of the Leahy-Smith America Invents Act (AIA)) ensures that a claim is definite.

There are several ways to draft a claim effectively using functional language and comply with section 112(b). One way is to modify the functional language with structure that can perform the recited function. Another way is to invoke 35 U.S.C. 112(f) (sixth paragraph pre-AIA) and employ so-called "means-plus-function" language. Under section 112(f), an element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material or acts in support thereof, and shall be construed to

cover the corresponding structure, material, or acts described in the specification and equivalents thereof. As is often the case with software-related claims, an issue can arise as to whether sufficient structure is present in the claim or in the specification, when section 112(f) is invoked, in order to satisfy the requirements of section 112(b) requiring clearly defined claim boundaries. Defining the structure can be critical to setting clear claim boundaries.

III. Topics for Public Comment and Discussion at the Roundtable Events: The USPTO is seeking input on the following topics relating to enhancing the quality of software-related patents. These initial topics are intended to be the first of many topics to be explored in a series of roundtables that may ultimately be used for USPTO quality initiatives, public education or examiner training. First, written and oral comments are sought on input regarding improving the clarity of claim boundaries for software-related claims that use functional language by focusing on 35 U.S.C. 112 (b) and (f) during prosecution of patent applications. Second, written and oral comments are sought on future topics for the Software Partnership to address. Third, oral comments are sought on the forthcoming Request for Comments on Preparation of Patent Applications to the extent that the topics of that notice particularly pertain to software-related patents.

The initial topics for which the USPTO is requesting written and, if desired, oral comments are as follows:

**Topic 1: Establishing Clear Boundaries for Claims That Use Functional Language** 

The USPTO seeks comments on how to more effectively ensure that the boundaries of a claim are clear so that the public can understand what subject matter is protected by the patent claim and the patent examiner can identify and apply the most pertinent prior art. Specifically, comments are sought on the following questions. It is requested that, where possible, specific claim examples and supporting disclosure be provided to illustrate the points made.

- 1. When means-plus-function style claiming under 35 U.S.C. 112(f) is used in software-related claims, indefinite claims can be divided into two distinct groups: claims where the specification discloses no corresponding structure; and claims where the specification discloses structure but that structure is inadequate. In order to specify adequate structure and comply with 35 U.S.C. 112(b), an algorithm must be expressed in sufficient detail to provide means to accomplish the claimed function. In general, are the requirements of 35 U.S.C. 112(b) for providing corresponding structure to perform the claimed function typically being complied with by applicants and are such requirements being applied properly during examination? In particular:
  - (a) Do supporting disclosures adequately define any structure corresponding to the claimed function?
  - (b) If some structure is provided, what should constitute sufficient 'structural' support?
  - (c) What level of detail of algorithm should be required to meet the sufficient structure requirement?
- 2. In software-related claims that do not invoke 35 U.S.C. 112(f) but do recite functional language, what would constitute sufficient definiteness under 35 U.S.C. 112(b) in order for the claim boundaries to be clear? In particular:

- (a) Is it necessary for the claim element to also recite structure sufficiently specific for performing the function?
- (b) If not, what structural disclosure is necessary in the specification to clearly link that structure to the recited function and to ensure that the bounds of the invention are sufficiently demarcated?
- 3. Should claims that recite a computer for performing certain functions or configured to perform certain functions be treated as invoking 35 U.S.C. 112(f) although the elements are not set forth in conventional means-plus-function format?

## **Topic 2: Future Discussion Topics for the Software Partnership**

The USPTO is seeking public input on topics related to enhancing the quality of software-related patents to be discussed at future Software Partnership events. The topics will be used in an effort to extend and expand the dialogue between the public and the USPTO regarding enhancing quality of software-related patents. The Software Partnership is intended to provide on-going, interactive opportunities and a forum for engagement with the USPTO and the public on software-related patents. Therefore, to plan future events, the USPTO seeks input on which topics, and in what order of priority, are of most interest to the public. Input gathered from these events, may be used as the basis for internal training efforts and quality initiatives.

One potential topic for future discussion is how determinations of obviousness or nonobviousness of software inventions can be improved. Another potential topic is how to provide the best prior art resources for examiners beyond the body of U.S. Patents and U.S. Patent Publications. Additional topics are welcomed.

Another topic for which the USPTO is requesting oral comment at the roundtable events is as follows:

**Topic 3: Oral Presentations on Preparation of Patent Applications** 

In the near future, the USPTO will issue a Request for Comments on Preparation of Patent Applications. The purpose of this forthcoming Request for Comments is to seek public input on whether certain practices could or should be used during the preparation of an application to place the application in the best possible condition for examination and whether the use of these practices would assist the public in determining the scope of the claims as well as the meaning of the claim terms in the specification. To ensure proper consideration, written comments to the forthcoming Request for Comments should only be submitted in response to that notice to QualityApplications\_Comments@uspto.gov. However, registrants may make oral presentations at the Silicon Valley and New York City roundtable events on the topics related to the forthcoming Request for Comments to the extent that the topics pertain to software-related inventions. Note particularly two questions from the forthcoming Request for Comments, which are previewed below. Oral comments are requested on the advantages and disadvantages of applicants employing the following practices when preparing patent applications as they relate to software claims.

- Expressly identifying clauses within particular claim limitations for which the
  inventor intends to invoke 35 U.S.C. 112(f) and pointing out where in the
  specification corresponding structures, materials, or acts are disclosed that are linked
  to the identified 35 U.S.C. 112(f) claim limitations; and
- Using textual and graphical notation systems known in the art to disclose algorithms
  in support of computer-implemented claim limitations, such as C-like pseudo-code or
  XML-like schemas for textual notation and Unified Modeling Language (UML) for
  graphical notation.

Date: December 27, 2012

David J. Kappos

Under Secretary of Commerce for Inte

Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office

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